



Flower Fun

From the yellow dandelion in your lawn to the pink apple blossom on the tree, flowers are everywhere in every shape, size and color.

Flowers make our world bright and beautiful, but have you ever wondered why they are so colorful or what bees are doing when they visit a flower? Use the activities in this packet to explore flowers!

Did you know you can color with dandelion flowers?

TRY IT!

Look around your yard for these bright, cheery flowers.
Use the yellow part to color by rubbing it on a piece of paper.

Did you know: A flower must be pollinated in order to produce seeds. Bees, butterflies, hummingbirds, and even bats help move pollen from flower to flower. Brightly colored flowers and sweet nectar are just a few ways plants attract pollinators. Just like you have a favorite color, so do pollinators! While bees are attracted to bright blue and purple flowers, butterflies often prefer yellow, orange and red.



Color Hunt:

Go on a walk to see what colors you can find!

- Take a box of crayons or colored pencils with you.
- Pull out a random crayon/pencil and see if you can find a plant or flower that matches it!
- How many colors can you find?

Flower visitors:

- Find a flower to sit and observe.
- Make a note in your journal of what color the flower is.
- List what interacts with it. Did a bee visit? How many times? Did an ant crawl up the stem?
- Repeat these steps with a different colored flower and compare the visitors!





Plant Pressing

Plant pressing is a technique used to flatten and dry out plant samples. Dried plant material can be used by botanists to study plants or for craft projects like suncatchers or jewelry.

Create your own plant press to preserve plants from your own backyard!

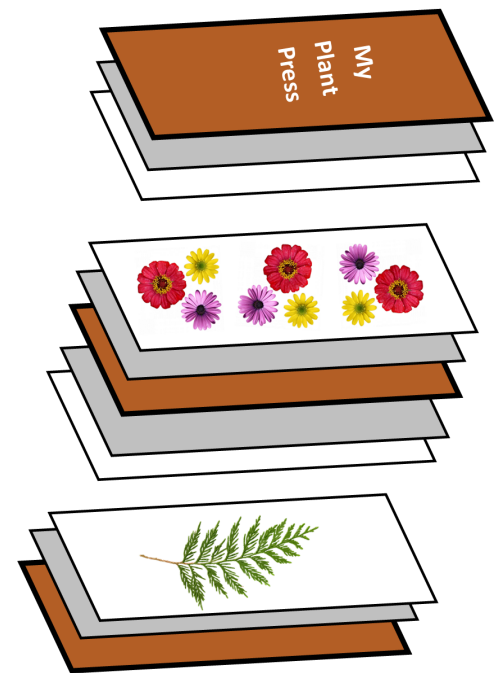
MAKE IT!

What you'll need:

- Cardboard—3 pieces 4x6 inches
- Newspaper—4 pieces 4x6 inches
- White paper—4 pieces 4x6 inches
- 2 rubber bands
- Plant material

The process:

1. Cut cardboard, newspaper, and white paper so they are all 4 x 6 inches in size.
2. Collect plant material with an adult. Don't limit yourself to just flowers; you can collect leaves too!
3. Place your plant material between two pieces of white paper, then place this between two pieces of newspaper and finally between two pieces of cardboard. Repeat this with your other materials and layer to complete your press. Use diagram to help you.
4. Once layered, wrap the entire press with two rubber bands to press it tight.
5. Color and design the front cover of your plant press and make it your own!
6. Leave your plant material to dry in the plant press in a well-ventilated area for at least two weeks. Place heavy books on top of your plant press for extra weight if needed.
7. Once dried, gently remove your pressed material and refill with fresh plants to repeat the process all season long!



Plant material tips:

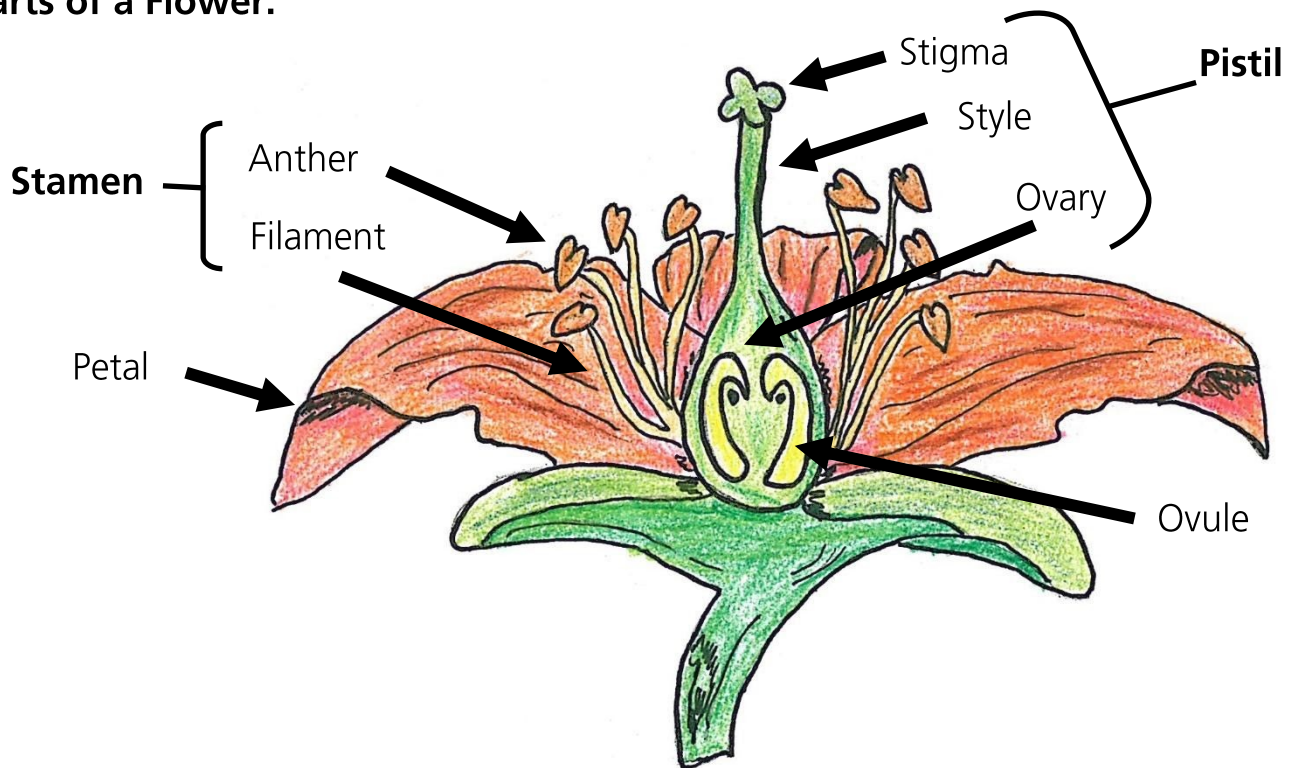
- Collect beautiful, healthy specimens for your project.
- Make sure your entire plant sample fits on the press and nothing is hanging off the edge.
- Pick flowers that are thin so they dry faster, or gently take petals off to dry separately.
- Light or white colored flowers often turn dark brown when dried.



Flower Dissection

What goes on inside a flower? The best way to find out is to open it up and look inside. Scientists call this a dissection.

Parts of a Flower:



- **Petal:** A special, protective leaf that attracts and guides pollinators
- **Stamen:** The complete male part of the flower
 - **Anther:** Contains the pollen
 - **Filament:** Supports the anther
- **Pistil:** The complete female part of the flower
 - **Stigma:** Contains nectar and receives pollen
 - **Style:** Supports stigma and transports pollen to the ovary
 - **Ovary:** An immature fruit that contains ovules
 - **Ovule:** An unfertilized seed

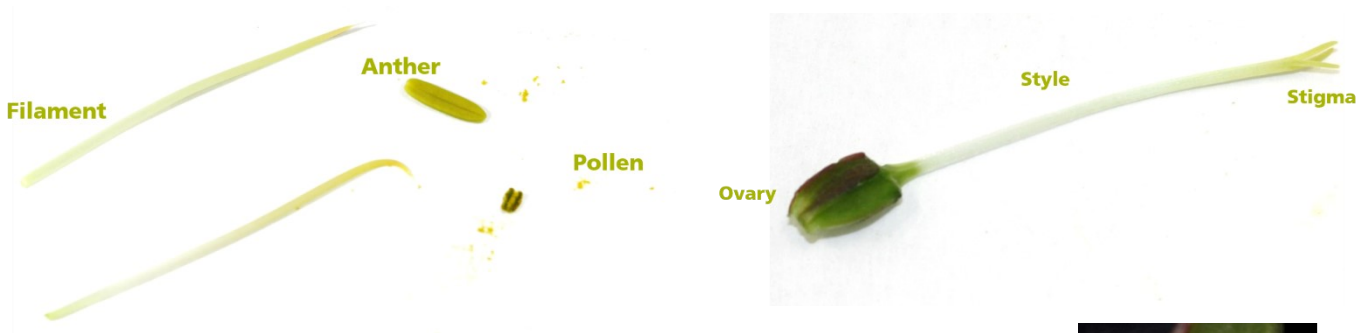


Flower Dissection

DISSECT:

See how many flower structures you can find in a flower of your own.

1. Head outside and find at least one flower that you can sacrifice to this scientific exploration. Larger flowers are easier to dissect.
2. Observe the outside of your flower. It may be helpful to draw a detailed sketch, snap a picture or take notes in a journal.
3. Carefully remove the **petals** one by one. *How many petals did your flower have? Note the color and any patterns on the petals. What is the purpose of these colors or markings?*
4. Now look for the **anthers** and/or **stigma**. A hand lens or magnifying glass will help you get a closer look.
Anthers have a fuzzy or dusty appearance. *What is this powder-like substance?*
The stigma is usually smooth and sticky. *What makes the stigma sticky?*



5. If you located the stigma, see if you can find the **ovary**. This is typically a swollen area near the base of the flower.
6. Using your thumbnail slice the ovary in half. If you're lucky, you might see ovules. *What do ovules develop into after pollination? What does the ovary become?*

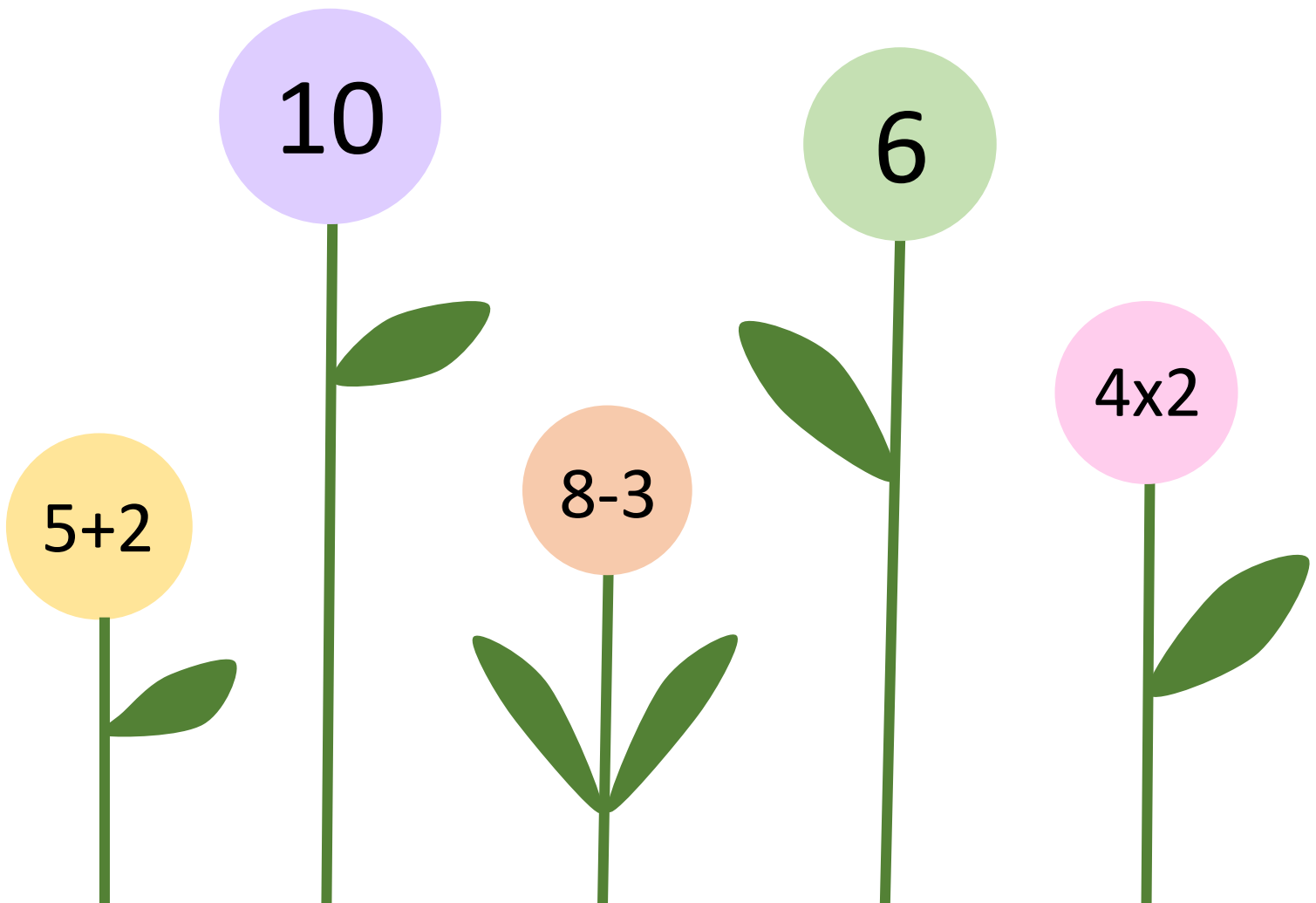




Petal Math

How many petals do flowers have? It depends on the type of flower. Counting the number of petals can help you identify what type of flower you are looking at!

The number in the center of each flower represents the number of petals that flower needs. Can you draw the correct number of petals around each flower?





Flowers We Eat

Have you ever eaten a flower? If you have eaten broccoli or cauliflower you

TASTE!

These yummy vegetables are not the only edible flowers. Whether tossed in a salad or garnishing a cake, below are a few edible flowers you might find in your backyard!



Violets:

These dainty flowers have a sweet floral taste and are great when sugared and put atop desserts.



Lavender:

When sprinkled into desserts like vanilla cake, lavender releases a strong, sweet flavor.



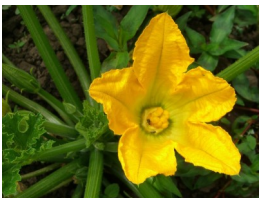
Nasturtiums:

These bright flowers have a spicy, peppery taste. The leaves, flowers and seeds of this plant are all edible.



Calendula:

This beautiful golden flower is often tossed fresh in salads or sautéed to release a flavor similar to saffron (which also comes from a flower!).



Squash Blossoms:

All plants in the squash family, including zucchini and pumpkin, have edible flowers. These large yellow flowers have a slightly sweet taste and are great on top of pizza.



Dandelions:

From the roots to the flower, every part of this common yard flower is edible. These flowers are sweet and crunchy when eaten raw but can also be breaded and fried.

Flower tasting tips:

- **Not all flowers are edible!** Always ask an adult before tasting any flowers.
- Avoid flowers that may have been sprayed with any chemicals.
- Wash flowers gently in a bowl of cold water and let air dry before tasting.
- In most cases only eat the petals of the flower, as other parts of the flower like the stigma or anthers might give off a bitter taste.

If you don't find any of these flowers growing in your yard, it's not too late to go buy some seeds and plant your own edible flower garden!



The Name Game



A botanist is a person who studies plants. Botanists often have the challenge of naming plants. A plant might be named based on its smell, color or other visible characteristic. For example, shooting star is a common name for this plant because of the arching shape of the stem and flower.

Tips for Journaling:

- Start each entry with your location, date/time and a few notes about the weather.
- Remember to **WIN** when you journal. Use **W**ords, **I**llustrations and **N**umbers in your entries.
- Most importantly, follow Rachel Carson (marine biologist) and ask yourself, “What if I had never seen this before? What if I never see it again?”

JOURNAL:

Now it's your turn to be a botanist and name a flower! Follow the steps below and don't forget to draw and write down your discoveries along the way.

1. Find a flower in your yard or neighborhood. Examine it very closely, using all of your senses. Be sure to be gentle and not pick the flower.
2. Make a list of words to describe your flower and draw a detailed sketch.
3. Circle the words or parts of your drawing that you find most interesting.
4. Use these circled characteristics to name your flower!

If you want to learn more about your flower, observe it in the morning, midday and evening to see the changes that unfold! You can check on it each day as more changes are likely to happen.



Fantastic Flowers

Follow the instructions below to create your own tissue paper flowers that are sure to attract some attention!



MAKE YOUR OWN:

What you'll need:

- Tissue paper of assorted colors
- Craft pipe cleaners, chopsticks or twigs
- Clear tape
- Scissors
- Stapler

The process:

1. Stack several pieces of tissue paper. Adjusting the width and number of layers will determine the size of your flower.
2. Starting at one end, accordion-fold the stack of paper in about one inch sections.
3. Place a staple in the center of your folded paper to secure it.
4. Wrap a pipe cleaner around the center to attach the flower to the stem. Cut and fold tissue paper leaves for the stem. You can also use chopsticks or small twigs as stems and secure with clear tape.
5. Use scissors to cut the edges of your paper. Pointy, scalloped or fringed cuts will all create different petal shapes.
6. Unfold and carefully separate the layers of tissue paper. Fluff and finish.
7. Repeat to create a beautiful bouquet of flowers to put in a vase that will last forever!

Try layering different sizes of tissue paper circles then pushing a pipe cleaner through the center and folding the circles up to create a cup shaped flower. Experiment with different folding techniques and colors of paper to create a variety of shapes and styles of flowers!

